



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,535	02/25/2002	Yukiko Takeda	500.41227X00	4269

24956 7590 11/17/2006

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

NGUYEN, THANH T

ART UNIT PAPER NUMBER

2144

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/081,535	Applicant(s) TAKEDA ET AL.	
	Examiner Tammy T. Nguyen	Art Unit 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 20-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENT
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20503
www.uspto.gov

Detailed Office Action

1. This action is responsive to the application filed on February 25, 2006.
2. Claims 1-24 are presented for examination.

Claim Objections

3. Claims 8, 12 and 13 objected to because of the following informalities:

Applicants are required to spell out the term "SIP message" and "SIP communication". Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al., (hereinafter Hirose) U.S. Publication No.2001/0049825A1 in view of Funaya et al., (hereinafter Funaya) U.S. Patent No. 6,263,393.
6. As to claim 1, Hirose discloses the invention substantially as claimed, Hirose discloses including an address translator for connection a network A conforming to a address system P to a network B conforming to a address system Q, said address translator comprising: an address translating function for translating an address conforming to the addressing system P to an address conforming to the addressing system Q, or vice versa [see Hirose, paragraph 0027] (*the Mac address is converted from Ma3 to Ma4 and Ma4 to Ma3*); and a detecting function for detecting a communication conforming to a particular protocol based on at least one of information on a destination [see Hirose, paragraph, 0014] (*detecting a destination of data to be transmitted*), wherein said address translator translates an address of the communication data by said address translation function [see Hirose, paragraph, 0027] (*the IP address is converted from the global IP address to the private IP address*), and when said address translator creates translation information including a correspondence relationship between addresses in the addressing system P and address in addressing system Q for translating an address [see Hirose, paragraph, 0027]. However, Hirose does not explicitly disclose header of communication data, and the first and second portions of the communication data.

7. In the same field of endeavor, Funaya discloses (e.g., Bus switch for realizing bus transactions across two or more buses). Funaya discloses header of communication data [see Funaya, col.11, lines 45-50, and col.12, lines 59-61](the transaction cell is composed of a header) and the first and second regions of the communication data (see Funaya multiple portions of data in fig.23).
8. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Funaya's teachings of a Bus switch for realizing bus transactions across two or more buses with the teachings of Hirose to have determining header of communication data, and first and second region data of the communication data for the purpose of decreasing the bandwidth of the line between the bus bridge and the switch module [see Funaya, col.2, lines 63-65).
9. As to claim 2, Hirose, teaches the invention as claimed, further comprising communicating means for communicating with a server device [see Hirose, paragraph 0030] (server device), wherein said address translator sends said translation information [see Hirose, paragraph, 0027] (*the IP address is converted from the global IP address to the private IP address*).
10. As to claim 3, Hirose teaches the invention as claimed, wherein further comprising a processing part for translating an address described in the communication data [see Hirose, paragraph, 0027] (*the IP address is converted from the global IP address to the private IP address*). However, Hirose does not explicitly disclose a second portion of the communication data.

11. In the same field of endeavor, Funaya discloses (e.g., Bus switch for realizing bus transactions across two or more buses). Funaya discloses a second portion of the communication data (see Funaya multiple portions of data in fig.23).
12. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Funaya's teachings of a Bus switch for realizing bus transactions across two or more buses with the teachings of Hirose to have a second portion of the communication data for the purpose of decreasing the bandwidth of the line between the bus bridge and the switch module [see Funaya, col.2, lines 63-65).
13. As to claim 4, Hirose discloses the invention substantially as claimed, Hirose discloses, including a method of processing a message comprising: first translation processing for translating information conforming to a first addressing system to information conforming to a second address system [see Hirose, paragraph 0027] (*the Mac address is converted from Ma3 to Ma4*); determination processing for determining whether or not the second portion requires a translation based on at least one of information on a destination [see Hirose, paragraph, 0014] (*detecting a destination of data to be transmitted*); and second translation processing for translating determined to require a translation, from information conforming to the first addressing system to information conforming to the second addressing system [see Hirose, paragraph, 0027] (*the IP address is converted from the global IP address to the private IP address*); However, Hirose does not explicitly disclose an information in port contained in a header of the message and the first part from information, information in the second portion.

14. In the same field of endeavor, Funaya discloses (e.g., Bus switch for realizing bus transactions across two or more buses). Funaya discloses header of communication data an information in port contained in a header of the message and the first part from information, information in the second portion [see Funaya, col.11, lines 45-63, and col.12, lines 59-61](the transaction cell is composed of a header) and (see Funaya multiple portions of data in fig.23).
15. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Funaya's teachings of a Bus switch for realizing bus transactions across two or more buses with the teachings of Hirose to have an information in port contained in a header of the message and the first part from information, information in the second portion for the purpose of decreasing the bandwidth of the line between the bus bridge and the switch module [see Funaya, col.2, lines 63-65).
16. As to claim 5, Hirose, teaches the invention as claimed, further comprising: using a first server and second server [see Hirose, paragraph 0030] (server device); performing said first translation processing in said first server; transferring the information from said first server to said second server; said second server extracting a translation; performing said second translation processing on said extracted parameter in said second server; and transferring the information which has undergone said second translation processing from said second server to said first server (see Hirose, paragraph, 0027] (*the IP address is converted from the global IP address to the private IP address*). However, Hirose does not explicitly disclose a second portion of the communication data and parameter.

17. In the same field of endeavor, Funaya discloses (e.g., Bus switch for realizing bus transactions across two or more buses). Funaya discloses a second portion of the communication data and parameter (see Funaya multiple portions of data in fig.23).
18. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Funaya's teachings of a Bus switch for realizing bus transactions across two or more buses with the teachings of Hirose to have a second portion of the communication data and parameter for the purpose of decreasing the bandwidth of the line between the bus bridge and the switch module [see Funaya, col.2, lines 63-65).
19. As to claim 6, Hirose teaches the invention as claimed, wherein said second server [see Hirose, paragraph 0030] (server device) has a table indicative of parameters which is required a translation, and extracts a parameter which requires a translation [see Hirose, paragraph 0027] (*the Mac address is converted from Ma3 to Ma4*). However, Hirose does not explicitly disclose a second portion.
20. In the same field of endeavor, Funaya discloses (e.g., Bus switch for realizing bus transactions across two or more buses). Funaya discloses a second portion of the communication data (see Funaya multiple portions of data in fig.23).
21. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Funaya's teachings of a Bus switch for realizing bus transactions across two or more buses with the teachings of Hirose to have second portion of the communication data for

the purpose of decreasing the bandwidth of the line between the bus bridge and the switch module [see Funaya, col.2, lines 63-65).

22. As to claim 7, Hirose teaches the invention as claimed, said first server transfer the parameter which requires a translation together with a tag added thereto, said second portion to said second server, said second server [see Hirose, paragraph, 0030] extracts a parameter which requires a translation from said second portion based on said tag [see Funaya, fig. 1].
23. As to claim 9, Bowman-Amuah teaches the invention as claimed, including an address translator connected to both a first network conforming to a first addressing system and a second network conforming to a second address system, said address translator comprising: a memory part for holding a translation rule for translating said first addressing system to said second addressing system, or vice versa[see Hirose, paragraph 0027] (*the Mac address is converted from Ma3 to Ma4 and Ma4 to Ma3*); a translating part for translating a first address in input information conforming to said first addressing system to a second address conforming to said second addressing system, or vice versa based on said translation rule [see Hirose, paragraph, 0027] (*the IP address is converted from the global IP address to the private IP address*), wherein a communication having information conforming to said first addressing system is detected based on at least one of information of a destination [see Hirose, paragraph, 0014] (*detecting a destination of data to be transmitted*); and a function of outputting said input information and said translation rule[see Hirose, paragraph, 0036](outputted the

network though the port). However, Hirose does not explicitly disclose header of communication data.

24. In the same field of endeavor, Funaya discloses (e.g., Bus switch for realizing bus transactions across two or more buses). Funaya discloses header of communication data [see Funaya, col.11, lines 45-50, and col.12, lines 59-61](the transaction cell is composed of a header).
25. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Funaya's teachings of a Bus switch for realizing bus transactions across two or more buses with the teachings of Hirose to have determining header of communication data for the purpose of decreasing the bandwidth of the line between the bus bridge and the switch module [see Funaya, col.2, lines 63-65).
26. As to claim 10, Hirose teaches the invention as claimed, further comprising a function of receiving said input information having a translated address using said outputted input information and translation rule [see Hirose, paragraph, 0036](outputted the network though the port).
27. As to claim 11, Hirose teaches the invention as claimed, further comprising a communication function for communicating with a server device, wherein said address translator sends said input information to said server device, and received said input information having an address translated by said server device [see Hirose, paragraph, 0014] (*detecting a destination of data to be transmitted*).
28. As to claim 12, Hirose teaches the invention as claimed, further comprising: a function of detecting an SIP communication; and a function of creating translation

information including a correspondence relationship between an address in the first network conforming to the first addressing system and an address in the second network conforming to the second addressing system [see Hirose, paragraph 0027] (*the Mac address is converted from Ma3 to Ma4 and Ma4 to Ma3*); in association with said server device, when an SIP communication is detected [see Hirose, paragraph, 0014] (*detecting a destination of data to be transmitted*).

29. As to claim 13, Hirose teaches the invention as claimed, further comprising a function of detected information for translation included in the SIP communication, and adding identification information to said for translation [see Hirose, parameter 0032].
30. As to claim 15, Hirose teaches the invention as claimed, further comprising: a processing part connected through an internal bus, wherein said input information is sent to said processing part through said internal bus, and said input information having a protocol translated by said processing part is received through said internal bus [see Hirose, paragraph 0027] (*the Mac address is converted from Ma3 to Ma4 and Ma4 to Ma3*).
31. As to claim 20, Hirose teaches the invention as claimed, wherein said address translator sends information in said second region of the communication data with the translation information [see Hirose, paragraph 0027] (*the Mac address is converted from Ma3 to Ma4 and Ma4 to Ma3*); and said information in said second region comprises parameter which requires translation [see Funaya, fig.1].

32. As to claim 21, Funaya discloses the invention as claimed, wherein said address translator sends the information in said second region with a tag added to said parameter by said address translator, wherein said server device extracts the parameter which requires a translation from the second region based on said tag [see Funaya fig.1].
33. As to claim 24, Hirose teaches the invention as claimed, wherein said first server sends information in with a translation information including a correspondence relationship between addresses in the first addressing system and address in second addressing system for translating an address [see Hirose, paragraph, 0027] *(the IP address is converted from the global IP address to the private IP address)*. However, Hirose does not explicitly disclose a second portion of the communication data and parameter.
34. In the same field of endeavor, Funaya discloses (e.g., Bus switch for realizing bus transactions across two or more buses). Funaya discloses a second portion of the communication data and parameter (see Funaya multiple portions of data in fig.23).
35. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Funaya's teachings of a Bus switch for realizing bus transactions across two or more buses with the teachings of Hirose to have a second portion of the communication data and parameter for the purpose of decreasing the bandwidth of the line between the bus bridge and the switch module [see Funaya, col.2, lines 63-65).

36. Claims **8, 22, and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al., (hereinafter Hirose) U.S. Publication No.2001/0049825A1 in view of Funaya et al., (hereinafter Funaya) U.S. Patent No. 6,263,393 further in view of Tsao et al, (hereinafter Tsao) U.S. Patent No. 6,862,274.
37. As to claim 8, Hirose discloses the invention substantially as claimed, information for translator is an address [see Hirose, fig.1]. However, Hirose does not explicitly first portion is an IP header, said second portion is a payload including an SIP message.
38. In the same field of endeavor, Funaya discloses (e.g., Bus switch for realizing bus transactions across two or more buses). Funaya discloses first portion is an IP header, said second portion is a payload including an SIP message [see Funaya, col.11, lines 45-50, and col.12, lines 59-61](the transaction cell is composed of a header).
39. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Funaya's teachings of a Bus switch for realizing bus transactions across two or more buses with the teachings of Hirose to have determining header of communication d first portion is an IP header, said second portion is a payload including an SIP message for the purpose of decreasing the bandwidth of the line between the bus bridge

and the switch module [see Funaya, col.2, lines 63-65). Also, Hirose and Funaya do not explicitly disclose one of first protocol and second protocol is IPV4, the other is IPV6.

40. In the same field of endeavor, Tsao discloses (e.g., Method and system capable of providing mobility support for IPv4/IPv6 inter-networking). Tsao discloses one of first protocol and second protocol is IPV4, the other is IPV6 [see Tsao, col.4, lines 3-37](IPv4/IPv6).

41. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Tsao's teachings of a Method and system capable of providing mobility support for IPv4/IPv6 inter-networking with the teachings of Hirose to have one of first protocol and second protocol is IPV4, the other is IPV6 for the purpose of improvement of making the roaming in the networks with different network protocol [see Tsao col.1, lines 22-24].

42. As to claim 22 and 23, Hirose does not explicitly disclose in case of that the addressing system P is IPv4, the addressing system Q is IPv6, and wherein in case of that the addressing system P is IPv6 and the addressing system Q is IPv4.

43. In the same field of endeavor, Tsao discloses (e.g., Method and system capable of providing mobility support for IPv4/IPv6 inter-networking). Tsao discloses in case of that the addressing system P is IPv4, the addressing system Q is IPv6, and wherein in case of that the addressing system P is IPv6 and the addressing system Q is IPv4[see Tsao, col.4, lines 3-37](IPv4/IPv6).

44. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Tsao's teachings of a Method and system capable of providing mobility support for IPv4/IPv6 inter-networking with the teachings of Hirose to have in case of that the addressing system P is IPv4, the addressing system Q is IPv6, and wherein in case of that the addressing system P is IPv6 and the addressing system Q is IPv4 for the purpose of improvement of making the roaming in the networks with different network protocol [see Tsao col.1, lines 22-24].
45. Claims 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al., (hereinafter Hirose) U.S. Publication No.2001/0049825A1 in view of Yoshizawa et al., (hereinafter Yoshizawa) U.S. Patent No. 6,944,169.
46. As to claim 16, Hirose discloses the invention substantially as claimed, Hirose discloses including in a communication network in which a network conforming to a protocol P and a network conforming to a protocol Q are interconnected through an address translator [see Hirose fig.1], a server device operative in cooperation with said address translator, wherein said server device translates an address, the address of which has not been translated by said address translator using translation rule between the protocol P and protocol Q which is stored in said address translator [see Hirose, paragraph, 0027] (*the IP address is converted from the global IP address to the private IP address*). However, Hirose does not explicitly disclose predetermined portion.

47. In the same field of endeavor, Yoshizawa discloses (e.g., Method and apparatus for managing quality of service in network device). Yoshizawa discloses predetermined portion [see Yoshizawa, col.13, lines 17-48] (*the predetermined portion of the incoming data packet to be defined anywhere within the data packet*).
48. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Yoshizawa's teachings of a Method and apparatus for managing quality of service in network device with the teachings of Yoshizawa to have a predetermined portion for the purpose of minimum bandwidth and minimum delay form the network [see Yoshizawa, col.1, lines 40-45].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy T. Nguyen whose telephone number is 571-272-3929. The examiner can normally be reached on Monday - Friday 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ***William Vaughn*** can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

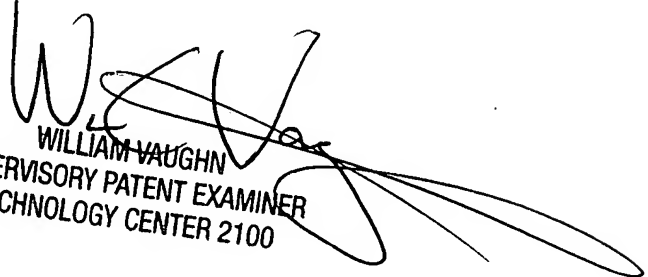
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

Art Unit: 2144

more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TTN

November 6, 2006


WILLIAM VAUGHN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100